

Intermec

Product Profile



- Dual-Radio wireless access point operates with any combination of 802.11a and 802.11g radios
- WPA security with secure roaming provides swift, seamless connectivity and enhanced mobility.
- Internal Power-Over-Ethernet eliminates need for power cables and outlets
- Enterprise Class access point to support mission critical applications
- TCP/IP Session Persistence
- IEC IP54 case withstands harsh environments (International ElectroTechnical commission)

MobileLAN™ access WA21

MobileLAN access WA21 is the next-generation dual radio access point that accommodates radios operating on both 802.11a and 802.11g RF bands. Dual-radio access points provide easy, cost-effective migration paths to the 54Mbps technology while supporting 802.11b clients, offering unparalleled flexibility when designing or expanding wireless communication networks. MobileLAN access WA21 offers a complete mix and match choice of 802.11 radios: 2 a-radios, 1 a-radio + 1 g-radio or 2 g-radios.

MobileLAN access WA21 is equipped with WPA advanced encryption and authentication capabilities including WEP 128 with auto key rotation, 802.1x, EAP/TLS, EAP/TTLS, and EAP/PEAP authentication and RADIUS server support. Beyond securing the wireless local area network, these features enable faster roaming and enhanced mobility. The secure high-speed exchange enforces network security while maintaining a seamless connection. MobileLAN access WA21 also supports products that provide FIPS 140 security, the Federal Information Protection Standard.

The integrated Power-over-Ethernet solution eliminates the need and expense of installing separate cables and outlets. The 10/100 Base-T capability or 100 Mb Fiber optic communications enable wireless service on 100 Mbps networks. The MobileLAN access WA21 auto negotiates with connected devices allowing the data flow to be set at the highest rate at which both devices can communicate.

An enterprise class access point, the MobileLAN access WA21 provides the features necessary to support mission critical applications. Intermec's industry leading IP tunneling enables mobile workers to roam from access point to access point without interrupting the network connection. This session persistence eliminates the need to have the routing application reside in the client device, have dedicated servers or manual entry of IP addresses. IP addresses are easier and less expensive to administer with Dynamic Host configuration Protocol (DHCP) server functionality. Network Access Translation (NAT) support enables the WA21 to assign and manage static IP addresses.

MobileLAN access WA21 uses Intermec's hardware based packet filtering, ensuring fewer dropped packets, less network congestion and better overall performance.

For Mission Critical applications, the MobileLAN access WA22 can act as a Telnet Gateway Appliance (TGAP). TGAP enables session persistence for TCP/IP traffic providing session connectivity for up to 8 hosts.

The MobileLAN access WA21 is housed in an IEC IP54 rated case with heater options, making it the ideal access point for harsh environments where cold temperatures, small airborne particles and moisture are prevalent.

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Physical Characteristics**Length:** 355 mm (14.0")**Height:** 95mm (3.75")**Width:** 236 mm (9.3")**Weight:** 2.63 kg (5.8 lb)**Input Voltage:** Power over Ethernet**Voltage Range:** 36 - 57 VDC**Current:** 350 mA @ 48 volts**Detection Methods:** 802.3af standard

PowerDsines' capacitance

Cisco's data pair (in-line)

Optional AC power**Voltage Range:** 100 - 240 VAC auto ranging**Input Power:** 15 Watts; Optional heater, additional 75 Watts

Supports dual radio and mixed dual radio operation, wireless bridging, DHCP client and server, NAT server, RADIUS server.

Wireless Characteristics**IEEE 802.11a Wireless Radio****Frequency Band:** 5.15 - 5.35 GHz frequency band**Radio Type:** IEEE 802.11a OFDM**Radio Power Output:** 15 Dbm**Radio Data Rate:** 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps - automatic fallback for increased ranges**Channels:** United States (FCC) 8 channels**Receiver Sensitivity:** -65 dBm @ 54 Mbps, -70 dBm @ 36Mbps, -82 dBm @ 6 Mbps.**Range:** approximately 10m @ 54 Mbps, 30M @ 36 Mbps, Unlimited range with roaming.**Compatibility:** Designed to comply with IEEE 802.11a wireless LAN standard for 5 GHz radio implementations**Transmit Power Levels:** 12.4 dBm @ 36-6 Mbps, 9.2 dBm @ 48 Mbps, 7 dBm @ 54 Mbps.**Bit Error Rate:** 10⁻⁵**IEEE 802.11g Wireless Radio****Frequency Band:** 2.4 GHz, (actual frequencies vary by country)**Radio Type:** IEEE 802.11g High Rate (54Mbps)**Modulation:** Direct Sequence Spread**Spectrum:** (CCK, OFDM)**Radio Power Output:** 18 dBm**Radio Data Rate:** 1, 2, 5.5, and 11 Mbps

Legacy CCK rates; 6, 9, 12, 18, 24, 36, 48, and 54 Mbps OFDM rates

Automatic Fallback for increased range

Channels: United States (FCC) 11 Channels, Europe (ETSI) 13 Channels, other countries per local regulations**Bit Error:** 10⁻⁵**Receiver Sensitivity:**

65 dBm@54 Mpss

70 dBm @ 36 Mpb

82 dBm@ 6 Mbps

	*802.11b Mode	*802.11g Mode	*802.11g Mode
Outdoor	1Mbps	6Mbps	54Mbps
	1968 ft. (600m)	1640 ft. (500m)	98 ft. (30m)
Indoor	1Mbps	6Mbps	54Mbps
	377 ft. (115m)	164 ft. (50m)	32 ft. (10)

*802.11b mode: 100mW with 1dBi gain Antennas

*802.11g mode: 30mW with 1dBi gain antennas

Security**IEEE 802.11 Wired Equivalent Privacy**

(WEP) standard, WEP 64 and WEP 128

are supported. Support for Key Integrity Protocol (TKIP), WPA and Full hardware support for Advanced encryption Standard (AES) security.

Network Information**Ethernet Interface:** 10/100 BaseT, 100 Mb**Fiber Optic****Ethernet Data Rate:** 10/100 Mbps**Filtering Rate:** Full Ethernet Rate**Filters:**

Protocol Filters-IP, IPX, NetBEUI, DECNET, AppleTalk

Other Broadcast Traffic Filters-IP, ARP, Novell RIP, SAP and LSP, Adjustable bandwidth allocation

Software Upgrades: Downloadable using Web browser or TFI over the network or serial port.**Management****Management Interfaces:** SNMP; Secure

Web browser-based manager; serial port, or Telnet via RF and Ethernet.

SNMP Agent: SNMP Version 1 supported**SNMP Traps:** Cold start, Authentication

Failure, MobileLAN manager reliable traps

SNMP MIBs: RFC 1213 (MIB-II), RFC 1643

(802 Dot3), MobileLAN access point MIB,

SNMP v1 versions of the 802.11MIB and a MIB for the 802.1x and proprietary security related events.

Accessories**Mounting brackets**

Wide selection of RF antennas and cables

Environments**Operating Temperature:** -25°C to +70°C with 802.11b radio (other radio options vary)**Heater option:** -30°C to 70°C

10% to 90% Relative humidity, non-condensing

Storage Temperature: -30°C to 75°C

10% to 90% Relative Humidity, non-condensing

Industrial Sealing: IEC IP54 (~NEMA 3)**Regulatory Approvals**

EN 55022 / CISPR 22 Class A; FCC Part 15 & ICES-003 Class A; C tick Marked (AS 3548); CE Marked, compliant with RTT&E, EMC, LVD Directives (see separate radio approvals); UL listed, UL 1950/C22.2 #950 IEC; 60529-IP53 and C22.2 #94-ENC 3.5; TUV Licensed, EN 60950 & EN 60539-IP53; NYCE Certified, NOM 19.

Radio Approvals

802.11a: FCC Part 15.407 Certified; Canada RSS 210 Certified; SCT NOM-EM121 Certified; Compliant with Australian RF Regulations; Additional Country Specific RF Type Approvals will be added over time.

802.11g: FCC Part 15.247 Certified; Canada RSS 210 Certified; ETS 300 328 Type Approved; SCT NOM-EM121 Certified; Compliant with Australian RF Regulations; Additional Country Specific RF Type Approvals will be added over time

Disclaimer

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North America

Corporate Headquarters
6001 36th Avenue West
Everett, Washington 98203
tel: 425.348.2600
fax: 425.355.9551

Systems & Solutions
550 2nd Street S.E.
Cedar Rapids, Iowa 52401
tel: 319.369.3100
fax: 319.369.3453

Media Supplies
9290 Le Saint Drive
Fairfield, Ohio 45014
tel: 513.874.5882
fax: 513.874.8487

Canada

7065 Tranmere Drive
Mississauga, Ontario
L5S 1M2 Canada
tel: 905.673.9333
fax: 905.673.3974

Europe/ Middle East & Africa

Headquarters
Sovereign House
Vestern Road
Reading RG1 8BT
United Kingdom
tel: 44.118.987.9400
fax: 44.118.987.9401

Asia

Asia Regional Office
26-16 International Plaza
10 Anson Road
Singapore 079903
tel: 65.6324.8391
fax: 65.6324.8393

Beijing Representative Office
29 FL, Unit A1, China Merchant Tower
118 Jian Guo Road
Chaoyang District, Beijing 100022
Tel: 86 10.5165.5922
Fax: 86 10.6567.6778

Australia

Level 7, 200 Pacific Highway
Crows Nest, NSW 2065
Australia
tel: 61.2.9492.4400
fax: 61.2.9954.6300

South America & Mexico

Intermec South America Ltda.
Rua Samuel Morse 120 9 andar
Brooklin CEP04576-060
São Paulo, SP
Brazil
tel: 55.11.5502.6770

Intermec Technologies de Mexico
Av Tamaulipas #141, Primer Piso
Col. Hipodromo Condesa
Mexico, DF, 06140 Mexico
tel: 525.55.211.1919
fax: 525.55.211.8121

Internet

www.intermec.com

Sales

800.347.2636
(toll free in N.A.)
tel: 425.348.2726

Service and Support

800.755.5505
(toll free in N.A.)
tel: 425.356.1799

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expect MORE®

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- WPA security with secure roaming provides swift, seamless connectivity and enhanced mobility.
- Internal Power-Over-Ethernet eliminates need for power cables and outlets
- Enterprise Class access point to support mission critical applications
- TCP/IP Session Persistence



MobileLAN™ access WA22

MobileLAN access WA22 is a dual radio access point that accommodates radios operating on both 802.11a and 802.11g RF bands. Dual-radio access points provide easy, cost-effective migration paths to the 54Mbps technology while supporting 802.11b clients, offering unparalleled flexibility when designing or expanding wireless communication networks. MobileLAN access WA22 offers a complete mix and match choice of 802.11 radios: 2 a-radios, 1 a-radio + 1 g-radio or 2 g-radios.

MobileLAN access WA22 is equipped with Wireless Protected Access (WPA) capabilities including auto key rotation, 802.1x, EAP/TLS, EAP/TTLS, EAP/PEAP authentication and server support. Beyond securing the wireless local area network, these features enable faster roaming and enhanced mobility. The secure high-speed exchange enforces network security while maintaining a seamless connection. MobileLAN access WA22 also supports products that provide FIPS 140-2 security, the Federal Information Protection Standard.

The integrated Power-over-Ethernet solution eliminates the need and expense of installing separate cables and outlets. The 10/100 Base-T capability or 100 Mb Fiber Optic Communication enables wireless service on 100 Mbps networks. The MobileLAN access WA22 auto negotiates with connected devices allowing the data flow to be set at the highest rate at which both devices can communicate.

An enterprise class access point, the MobileLAN access WA22 provides the features necessary to support mission critical applications. Intermec's industry leading IP tunneling enables mobile workers to roam from access point to access point without interrupting the network connection. This session persistence eliminates the need to have the routing application reside in the client device, have dedicated servers or manual entry of IP addresses. IP addresses are easier and less expensive to administer with Dynamic Host configuration Protocol (DHCP) server functionality. Network Access Translation (NAT) support enables the WA22 to assign and manage static IP addresses.

MobileLAN access WA22 uses Intermec's hardware based packet filtering, ensuring fewer dropped packets, less network congestion and better overall performance.

For Mission Critical applications, the MobileLAN access WA22 can act as a Teinnet Gateway Appliance (TGAP). TGAP enables session persistence for TCP/IP traffic providing session connectivity for up to 8 hosts.

The MobileLAN access WA22 is the ideal enterprise-class access point for light industrial applications.

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Physical Characteristics

Length: 250 mm (9.84")
Height: 38 mm (1.49")
Width: 159 mm (6.27")
Weight: .625kg (1.38 lbs)
Input Voltage: Power over Ethernet
Voltage Range: 36 to 57 VDC
Current: 350 mA @ 48 volts
Detection Methods: 802.3af standard
 PowerDsine's capacitance Cisco's data pair
 (in-line)

Wireless LAN Characteristics

IEEE 802.11a Wireless Radio
Frequency Band: 5.15 - 5.35 GHz
 frequency band
Radio Type: IEEE 802.11a OFDM
Radio Power Output: 12.4 dBm @ 6-36
 Mbps, 9.2 dBm @ 48 Mbps, 7 dBm @ 54
 Mbps.
Radio Data Rate: 54Mbps, 48 Mbps, 36
 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9
 Mbps, 6 Mbps - with automatic fallback
 for increased range.
Channels: United states (FCC) 8 channels
Receiver Sensitivity: -65 dBm @ 54 Mbps,
 -70 dBm @ 36 Mbps, -82 dBm @ 6 Mbps.
Range: approximately 10m @ 54 Mbps,
 approximately 30M @ 36 Mbps, Unlimited
 Range with roaming.
Compatibility: Designed to comply with
 IEEE 802.11a wireless LAN standard for 5
 GHz radio implementations
Bit Error Rate: Better than 10⁻⁵

IEEE 802.11g Wireless Radio

Frequency Band: 2.4 GHz, actual
 frequencies vary by country
Radio Type: IEEE 802.11g High Rate (54
 Mbps)
Modulation: Direct Sequence Spread
 Spectrum (CCK, OFDM)
Radio Power Output: 18 dBm
Radio Data Rate: Radio Data Rate: 1, 2,
 5.5 and 11 Mbps Legacy CCK rates;
 6, 9, 12, 18, 24, 36, 48, and 54 Mbps OFDM
 rates
 Automatic Fallback for increased range

Channels: United States (FCC) 11
 Channels, Europe (ETSI) 13 Channels,
 other countries per local regulations
Bit Error Rate: Better than 10⁻⁵
Receiver Sensitivity:
 65 dBm @ 54 Mpss
 70 dBm @ 36 Mpb
 82 dBm @ 6 Mpbs

	*802.11b Mode	*802.11g Mode	*802.11g Mode
Outdoor	1Mbps	6Mbps	54Mbps
	1968 ft. (600m)	1640 ft. (500m)	98 ft. (30m)
Indoor	1Mbps	6Mbps	54Mbps
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*802.11b mode: 100mW with 1dBi gain Antennas

*802.11g mode: 30mW with 1dBi gain antennas

Security

IEEE 802.11 Wired Equivalent Privacy
 (WEP) standard, WEP 64 and WEP 128
 are supported. Support for Key Integrity
 Protocol (TKIP), WPA and Full hardware
 support for Advanced Encryption
 Standard (AES) security.

Network Information

Ethernet Interface: 10/100 BaseT, 100Mb
 Fiber Optic
Ethernet Data Rate: 10/100 Mbps
Filtering Rate: Full Ethernet Rate
Filters:
 Protocol Filters - IP, IPX, NetBEUI, DECNET,
 AppleTalk
 Other Broadcast Traffic Filters-IP ARP,
 Novell RIP, SAP and LSP, Adjustable
 bandwidth allocation
Software Upgrades: Downloadable
 using Web Browser or TFTP over the
 network or serial port.

Management

Management Interfaces: SNMP; Secure
 Web browser-based manager; serial port
 or Telnet via RF, and Ethernet.
SNMP Agent: SNMP Version 1 supported
SNMP Traps: Cold start, Authentication
 Failure, MobileLAN manager reliable traps

SNMP MIBs: RFC 1213 (MIB-II), RFC 1643
 (802 Dot3), MobileLAN access point MIB,
 SNMP v1 versions of the 802.11 MIB and
 a MIB for 802.x and proprietary security
 related events.

Accessories

Mounting Brackets
 Serial Console Cable
 Wide selection of RF antennas and cables

Environment

Operating Temperature: Standard Unit
 -20°C to +55°C with 802.11b radio (other
 radios options vary
Storage Temperature: -30°C to +75°C
 10% to 90% Relative Humidity, non-
 condensing

Regulatory Approvals

EN 55022/CISPR 22 Class A; FCC Part 15
 & ICES-003 Class A; C tick Marked (AS
 3548); CE Market, Compliant with RTT&E,
 EMC, LVD Directives; (See separate radio
 approvals); UL Listed, UL 1950 & IEC
 60529-IP53; CSA Certified, C22.2 #950
 & C22.3 #94-ENC 3.5; TUV Licensed, EN
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North America

Corporate Headquarters
 6001 36th Avenue West
 Everett, Washington 98203
 tel: 425.348.2600
 fax: 425.355.9551

Systems & Solutions
 550 2nd Street S.E.
 Cedar Rapids, Iowa 52401
 tel: 319.369.3100
 fax: 319.369.3453

Media Supplies
 9290 Le Saint Drive
 Fairfield, Ohio 45014
 tel: 513.874.5882
 fax: 513.874.8487

Canada

7065 Tranmere Drive
 Mississauga, Ontario
 L5S 1M2 Canada
 tel: 905.673.9333
 fax: 905.673.3974

**Europe/
Middle East & Africa**

Headquarters
 Sovereign House
 Vastern Road
 Reading RG1 8BT
 United Kingdom
 tel: 44.118.987.9400
 fax: 44.118.987.9401

Asia

Asia Regional Office
 26-16 International Plaza
 10 Anson Road
 Singapore 079903
 tel: 65.6324.8391
 fax: 65.6324.8393

Beijing Representative Office

29 FL Unit A1, China Merchant Tower
 118 Jian Guo Road
 Chaoyang District, Beijing 100022
 Tel: 86 10.5165.5922
 Fax: 86 10.6567.6778

Australia

Level 7, 200 Pacific Highway
 Crows Nest, NSW 2065
 Australia
 tel: 61.2.9492.4400
 fax: 61.2.9954.6300

South America & Mexico

Intermec South America Ltda.
 Rua Samuel Morse 120 9 andar
 Brooklin CEP04576-060
 São Paulo, SP
 Brazil
 tel: 55.11.5502.6770

Intermec Technologies de Mexico
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